

WHAT IS CLAIMED IS:

1. An interface circuit for inputting/outputting a signal between first and second apparatuses having different power units, respectively, comprising:
  - 5 a power node to which a first power voltage that is supplied from the power unit of said first apparatus is outputted;
  - a 3-state buffer which is driven by a second power voltage that is supplied from the power unit of said second apparatus and in which the output of the signal that is supplied from said second apparatus is controlled by an electric potential at said power node; and
  - 10 an analog switch which is driven by said second power voltage and in which a connection between an output side of said 3-state buffer and a logic circuit in said first apparatus is controlled by the electric potential at said power node.
- 15 2. An interface circuit for inputting/outputting a signal between first and second apparatuses having different power units, respectively, comprising:
  - a power node to which a first power voltage that is supplied from the power unit of said first apparatus is outputted;
  - 20 a voltage detector which detects a voltage at said power node and outputs a control signal when said voltage exceeds a reference voltage;
  - a 3-state buffer which is driven by a second power voltage that is supplied from the power unit of said second apparatus and in which the output of the signal that is supplied from said second apparatus is controlled by an electric potential at said power node; and
  - 25 an analog switch which is driven by said second power

voltage and in which a connection between an output side of said 3-state buffer and a logic circuit in said first apparatus is controlled by said control signal.

3. An interface circuit for inputting/outputting a signal

5 between first and second apparatuses having different power units, respectively, comprising:

a power node to which a first power voltage that is supplied from the power unit of said first apparatus is outputted;

10 a voltage detector which outputs a control signal when a voltage at said power node exceeds a reference voltage;

a 3-state buffer which is driven by a second power voltage that is supplied from the power unit of said second apparatus, controls the signal that is supplied from said second apparatus in accordance with a voltage that is applied to a control terminal and supplies said signal to a logic circuit in said first circuit; and

15 an analog switch which is driven by said second power voltage and in which a connection between said power node and the control terminal of said 3-state buffer is controlled by said control signal.